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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,530	05/18/2005	Shmaryu M Shvartsman	PHUS020449US	4305

38107 7590 02/07/2007

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
595 MINER ROAD  
CLEVELAND, OH 44143

EXAMINER
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ARANA, LOUIS M

ART UNIT	PAPER NUMBER
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2859

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/535,530	<b>Applicant(s)</b> SHVARTSMAN ET AL.	
	<b>Examiner</b> Louis M. Arana	<b>Art Unit</b> 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-26 and 29 is/are pending in the application.
- 4a) Of the above claim(s) 5-11, 19-26 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 13-17 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This communication is responsive to amendment 11/21/06. The extensive amendment to the claims places previously dependent claims in independent form without including the limitations of their previously base claims. As amended, claims 1-17, 19-26 and 29 are currently pending in this application. Claims 18 and 27-28 have been cancelled.

### ***Election/Restrictions***

2. Newly submitted claims 5-11(group I), claims 19-24 and 29 (group II) and 25-26 (group III) are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The inventions in these groups relate to the originally filed invention as subcombinations usable together, the subcombinations do not overlap in scope and are not obvious variants of one another.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 5-11, 19-26 and 29 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. Prosecution on originally presented claims 1-4 and 12-17 continues below:

***Claim Rejections - 35 USC § 102***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Schenck P.N. 5,561,371.

Schenck discloses a gradient coil for a Magnetic Resonance Imaging apparatus.

Applicant's attention is directed to Fig. 5-8 and their corresponding description. The gradient coil includes:

a primary coil 51 defining an inner cylindrical surface 63,  
a shield coil 53 defining an outer cylindrical surface 63 coaxially aligned with the inner cylindrical surface 61 and having a larger cylindrical radius ( $a_2 > a_1$ ) than the inner cylindrical surface ; and a plurality of coil jumps 55 electrically connecting the primary and shield coils, the coil jumps 53 defining a non-planar current-sharing surface 65 extending between an inner contour coinciding with the inner cylindrical surface 61 and an outer contour coinciding with the outer cylindrical surface 63, the primary coil, shield coil, and coil jumps cooperatively defining a current path that passes across the current-sharing surface 65 between the inner and outer contours, a plurality of times.

Note further, that the current sharing surface is conical, that the lengths of the cylindrical surfaces are different. Also as described in col. 7, the mathematical treatment

allows for optimization of parameters such as gradient coil linearity, uniformity and stored energy by the selection of the conductor paths.

***Response to Arguments***

5. Applicant's arguments filed 11/21/06 have been fully considered but they are not persuasive. Applicants arguments with respect to claim 1 are that Shenck does not disclose a "fingerprint" primary coil. While applicant appears to admit that Shenck's coil is indeed a fingerprint coil, the suggestion is that the coil somehow ceases to be a fingerprint coil because Shenck uses a folded design. The Examiner respectfully considers this distinction to be superfluous. Even if one looks at half of the gradient coil of Shenck (primary coil) the pattern of coil conductors can be reasonably described as a fingerprint coil. The examiner cannot ascribe patentable weight to a feature that provides the same function but "appears" different to the eye.

***Allowable Subject Matter***

6. Claim 12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

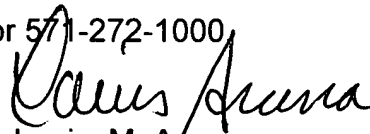
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis M. Arana whose telephone number is (571) 272-2236. The examiner can normally be reached on M-Thurs. Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Louis M. Arana  
Primary Examiner  
Art Unit 2859

lma  
2/1/07